

Claim 14. A hydraulic fitting for a fluid conduit, the fitting comprising:

a nut having a seal portion, a body portion, and an internal bore, the seal portion including a frustro-conical exterior surface and a seal groove, the seal groove formed into the frustro-conical exterior surface and perpendicular thereto, the seal groove being defined by a constant radius;

an annular seal member coupled to the nut and disposed at least partially in the seal groove;

a threaded member extending through the internal bore; and

a female connector engageable with the nut and having a frustro-conical surface.

Claim 15. The fitting of Claim 14, wherein the annular seal member has a circular cross-section.

Claim 16. The fitting of Claim 15, wherein the depth of the seal groove is approximately equal to seventy-five percent of the cross-sectional diameter of the annular seal.

Claim 17. The fitting of Claim 14, wherein the frustro-conical exterior surface has an included angle of approximately 20 degrees to approximately 50 degrees.

Claim 18. A fitting for a fluid conduit, the fitting comprising:

a fitting member having a cap, a threaded portion and a seal portion, the seal portion including a frustro-conical surface and a seal groove, the seal

groove formed into the frusto-conical surface and perpendicular thereto, the seal groove being defined by a constant radius;

an annular seal member disposed at least partially in the seal groove;

and

a port for receiving the fitting member.

Claim 19. The fitting of Claim 18, wherein the seal member has a circular cross-section and is compressible.

Claim 20. The fitting of Claim 18, further comprising a second seal member, the port having a groove portion for receiving the second seal member.

Claim 21. The fitting of Claim 18, further comprising a male connector connected to the fitting member, and a bore passing through the port, fitting member and male connector.